

2 torsional vibration damping means operating between said first part and at least
3 one of said second part, said turbine and said output element.

1 3. (Original) The torque converter of claim 1, further comprising a
2 stator provided in said housing intermediate said pump and said turbine.

Claims 4-120 (Canceled)

1 121. (Previously presented) A method of cooling an engageable and
2 disengageable bypass clutch which is installed in the rotary housing of a
3 hydrokinetic torque converter and has coaxial rotary driving and driven
4 components which frictionally engage each other when the clutch is at least
5 partly engaged, such partial engagement involving a slip of said components
6 relative to each other, comprising the steps of: providing in the housing first and
7 second plenum chambers and maintaining therein bodies of hydraulic fluid
8 arranged to at least partly engage the clutch in response to the establishment of
9 a pressure differential between said bodies; establishing at least one path for the
10 flow of fluid between said chambers by way of the clutch, at least in the partly
11 engaged condition of the clutch; and actively regulating the flow of fluid along the
12 at least one path in dependency upon friction torque between friction surfaces of
13 said driving and driven components.

1 122. (Previously presented) The method of claim 121, wherein said

2 regulating step includes increasing the rate of fluid flow along the at least one
3 path when the clutch operates with slip and reducing said rate of fluid flow when
4 the clutch operates without slip.

Claims 123-127 (canceled)

128. (New) A hydrokinetic torque converter, comprising: a housing rotatable about a predetermined axis; a pump rotatable by said housing about said axis; a turbine rotatable in said housing about said axis by and relative to said pump; means for rotating said housing; an output element rotatable about said axis and arranged to receive torque from said turbine; a fluid-operated bypass clutch arranged to transmit variable torque between said housing and said output element independently of said turbine, said clutch including a first part rotatable with said housing, a second part rotatable with said output element, and friction generating means operable to transmit torque between said parts with and without slip with attendant generation of friction heat during operation with slip; first and second plenum chambers containing bodies of hydraulic fluid at variable pressure with the provision for fluid flow between said chambers past said friction generating means, wherein said housing includes a cooling surface which engages said clutch and includes grooves which are imprinted into said surface and which terminate outside an outer radial border and inside an inner radial border of a friction lining associated with said housing.

1 129. (New) The torque converter of claim 128, further comprising
2 torsional vibration damping means operating between said first part and at least
3 one of said second part, said turbine and said output element.

1 130. (New) The torque converter of claim 128, further comprising a
2 stator provided in said housing intermediate said pump and said turbine.